

REMARKS

By the present Amendment, claims 1 and 5 have been amended to further clarify the concepts of the present invention. Specifically, claims 1 and 5 have been amended to more particularly point out and distinctly claim the subject matter which applicant regards as the invention. In addition, independent claim 1 has been amended to incorporate the subject matter of original claim 3 and a portion of original claim 4, both of which have been cancelled. Claim 5 has been rewritten in independent form to include the subject matter of original claims 1 and 3. Support for the amendment to claims 1 and 5 regarding a heat shield layer including a substrate resin and a heat shield filler in the form of particles kneaded in the substrate resin can be found, e.g., on page 14, line 16, through page 15, line 1, of the specification as filed. Entry of this Amendment is in order, and such action is respectfully requested.

In the Office Action, claims 1-5 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1 and 5 have been amended to address the issues noted in the Action. Amended independent claims 1 and 5 are clear, definite, and particularly point out and distinctly claim the subject matter which applicant regards as his invention. Withdrawal of the rejection is respectfully requested.

Claims 1-5 were also separately rejected under 35 U.S.C. §102(b) as being anticipated by Takeda et al. (U.S. 6,319,613), Fisher (U.S. 6,620,872), and Kondo (U.S. 5,830,568). Reconsideration these rejections in view of the preceding amendments and following comments is respectfully requested.

Takeda discloses fine particles of a hexaboride and fine particles of antimony-containing tin oxide, both of which are capable of absorbing heat radiation. As can be seen from claims 1 and 5, Takeda is directed to a coating solution containing fine hexaboride

particles and fine particles of an antimony-containing tin oxide, as well as a film formed by use of the coating solution.

It is submitted that in this regard, Takeda is markedly different from applicant's heat shielding material as set forth in amended independent claims 1 and 5, which recite a heat shielding material comprising a heat shield filler in the form of particles kneaded in a substrate resin, the heat shield layer being in the form of a single film or board. Among other things, there is no teaching or suggestion in Takeda of using a substrate resin selected from among polyethylene, polyvinyl chloride, polyvinylidene chloride, polyvinyl alcohol, polystyrene, polypropylene, and polyester as is presently claimed. In addition, Takeda does not disclose per unit area contents of 0.01 to 1 g/m<sup>2</sup> for lanthanum hexaboride and 1.0 to 50 g/m<sup>2</sup> for the antimony-doped tin oxide for the shield filler in the heat shield layer.

Furthermore, the recitation "the heat shield filler being kneaded in the substrate resin" has been included in the above amended claims. In doing so, Example 6 is outside the scope of the presently claimed invention, this example showing a film obtained by the use of a coating liquid containing particles of lanthanum hexaboride and an *ultraviolet curing resin*. Accordingly, none of the ultraviolet-curing resins listed in column 5, lines 8-18, of Takeda is included as a substrate resin in the presently claimed invention. In particular, contrary to the assertion contained in the Office Action, the disclosure regarding the binder resin at column 5, lines 8-18, of Takeda does not correspond to the substrate resins now defined by amended claim 1.

To sustain a rejection under 35 U.S.C. §102, a reference must disclose each and every element of a rejected claim. Takeda does not disclose each and every feature of independent claims 1 and 5 and, therefore, does not anticipate these claims, which are allowable. Claim 2

is also allowable due to dependence on allowable claim 1, as well as for the additional limitations provided by this claim.

Fisher also fails to disclose each and every feature of applicant's claimed invention. Fisher discloses a glass laminate for shielding solar radiation comprising lanthanum hexaboride and antimony tin oxide (ATO) as heat shield fillers and polyvinyl butyral (PVB) as a binder. According to Fisher, ethylene-vinyl acetate copolymer (EVA) also may be used as a binder as in conventional glass laminates, and various binders other than PVB may be used in glass laminate according to Fisher.

Among other things, the subject claims have been amended so as to not include using ethylene-vinyl acetate copolymer (EVA) as a substrate resin. For at least this reason, the applicant's presently claimed invention is distinguished with respect to Fisher.

It was asserted in the Office Action that Fisher discloses at column 3, lines 39-59, using PVB as a binder and that the PVB of Fisher comprises about 10-25 wt% of polyvinyl alcohol (PVA). It is submitted that this assertion as to the Fisher disclosure is not accurate. In fact, the cited passage only suggests that polyvinyl butyral (PVB) typically comprises about 10-25 wt% of OH groups, calculated as polyvinyl alcohol (PVA). Such does not mean that polyvinyl butyral (PVB) comprises 10-25 wt% of polyvinyl alcohol (PVA).

For at least the above reasons, Fisher does not anticipate the subject matter of applicant's amended independent claims 1 and 5 which, together with dependent claim 2, thus are allowable over Fisher.

Kondo, too, fails to disclose all features of applicant's presently claimed invention. Kondo teaches a laminated glass comprising ATO or ITO as a heat shield filler and PVB or EVA as a binder. Among other things, the subject claims have been amended so as to not include using ethylene-vinyl acetate copolymer (EVA) as a specific substrate resin. At least

in this respect, Kondo is deficient in comparison to the subject matter of amended independent claims 1 and 5 which, together with dependent claim 2, thus are allowable over Kondo.

For at least the foregoing reasons, reconsideration and withdrawal of the rejections of the claims as being anticipated by Takeda, Fisher, and Kondo are requested.

To the extent necessary during prosecution, applicant hereby requests any required extension of time not otherwise requested and hereby authorizes the Commissioner to charge any required fee not otherwise provided for, including application processing, extension, and extra claims fees, to Deposit Account 01-2340.

Respectfully submitted,

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